

REMARKS

Claims 1-15, 20, and 23-27 are pending. **Claims 1, 10, 12, 20, and 26** have been amended to clarify the claimed subject matter and not for any reason of patentability.

Applicant respectfully requests reconsideration and allowance of this application.

Rejections under 35 USC § 112

Claims 1, 10, 12, 20, and 26 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The rejection asserts that the claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rejection further asserts that **Claims 1, 10, 12, 20, and 26** recite the limitation “producing a network latency similar to the clients” and that the cited limitation is not described in the specification.

Claims 1, 10, 12, 20, and 26 have been amended and do not recite the limitation “producing a network latency similar to the clients”. The amendment also clarifies that the load balancing domain name servers (DNS-LBs) of the claimed subject matter are deployed in a proximity from which the actual network latency of a client connecting through an ISP may be measured. Support for these amendments may be found at page 5, line 21 – page 6, line 5 of the specification, which discloses:

While several companies have developed mechanisms to provide some form of global load balancing, none of these current systems measure actual network latency from physical locations close to the various clients. As a result, a particular client may be directed to a particular web server when, in fact, a different web server may have smaller latencies and give better performance from the client's physical location.

The system and infrastructure of the instant invention overcome this problem by performing global load

balancing from physical locations in close proximity to the actual client.

The above-cited section of the specification discloses that the system and infrastructure of the presently claimed subject matter overcomes the problem of not being able to measure actual network latency from physical locations close to the various clients by performing global load balancing from physical locations in close proximity to the actual client. That is, the purpose of placing the load balancing domain name server (DNS-LB) in close proximity to the actual client is to measure the actual network latency of the client.

Claims 1, 10, 12, 20, and 26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The rejection under 35 U.S.C. § 112, second paragraph, asserts that the phrase “similar to” included in **Claims 1, 10, 12, 20, and 26** renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by “similar”), thereby rendering the scope of the claim(s) unascertainable. **Claims 1, 10, 12, 20, and 26** have been amended to clarify the claimed subject matter and no longer recite the phrase “similar to”. Accordingly, the rejection under 35 U.S.C. § 112, second paragraph, is now moot.

Rejections under 35 USC 103(a) – He and Skene

Claims 1-16 and 20 and 23-27 stand rejected under 35 U.S.C. 103(a) as being anticipated by He et al. (U. S. Patent Number 6,671,259) (hereinafter “the He reference”) in view of Zisapel et al. (U. S. Patent Application Pub. No. US 2005/0022203 A1) (hereinafter “Zisapel”).

The Applicant respectfully traverses this rejection as the rejection fails to establish a prima facie case of obviousness, as set forth in MPEP §2143, which states, in part:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

In general, the He reference is directed to a simple system and method for load balancing where a client is directed to a load balancing server based on one criteria of a predetermined set of criteria. He also discloses that “the load balancing system and method is not limited to a specific location on the network” (*see* He, column 2, lines 9-10). Further, Zisapel is directed to a simple method for load balancing where a load balancer redirects a request from a client if the load balancer includes a record indicating that a different load balancer is appropriate for the client.

The rejection to **Claim 1** asserts that He teaches all the limitations of **Claim 1** with the exception being that He “fails to teach wherein the DNS are placed in physical proximity producing network latency similar to the client”. The rejection also asserts that Zisapel teaches “load balancing system”, and further, “Zisapel et al teaches wherein the clients are placed in physical proximity with the DNS and sending mapping information relating the IP address” at page 3, paragraph [0036]-[0038].

Claim 1 has been amended and does not recite the limitation “the DNS are placed in physical proximity producing network latency similar to the client”. Rather, **Claim 1** recites “a physical proximity from which the actual network latency of the clients may be measured”. Regardless, assuming the rejection asserts that the “triangulation mapping table 32” relates to the physical proximity between a load balancing server and a client, this is not taught by Zisapel. Rather, Zisapel teaches “[i]t is a particular feature of the present invention

for LB2 to designate a currently unused virtual IP address, such as 200.100.1.1, for LB1's use and store the mapping between the IP address of LB1 and the designated IP address in a triangulation mapping table 32". To wit, the triangulation mapping table of Zisapel does not store any physical proximity information; in contrast, the triangulation mapping table of Zisapel stores a mapping between the IP address of a first load balancing server and a currently unused virtual IP address. A virtual IP address is virtual and does not correspond to a physical location or proximity to a physical location.

The rejection further asserts that it would have been obvious to modify He in view of Zisapel "in order [to] indicate subnets and the best server farm site or sites to which requests from a particular subnet should be routed". Such an assertion fails to establish a prima facie case of obviousness as there is no suggestion or motivation within He to suggest one of ordinary skill in the art would be motivated to combine He with Zisapel or modify He in view of Zisapel. Consider that He does not discuss subnets, server farms and that He is already directed to indicating "the best" or "optimal" server where requests should be routed. For example, *see* He, column 1, lines 66 – column 2, line 3:

"[i]n order to reduce or regulate this server congestion, the present invention provides a load balancing system and method which distributes the client request to different servers on the WAN by selecting the most optimal server for a specific client request." (*emphasis added*)

Also consider that the disclosure of He encompasses subnets, as subnets are by definition included within a network. That is, the disclosure of He already includes functionality to "indicate subnets and the best server farm site or sites to which requests from a particular subnet should be routed" and the combination of the teachings of Zisapel would only add redundant functionality to He. Therefore, it is not reasonable to suggest any level of success in combining He and Zisapel as Zisapel offers no new functionality to He.

The Applicant respectfully submits that neither He nor Zisapel, either alone or in combination, disclose the limitations of Independent **Claim 1**. The Applicant also submits that because the rejections to Independent **Claims 10, 12, 20, 23, and 26** are made using the same rationale as the rejection to Independent **Claim 1**, Independent **Claims 10, 12, 20, 23, and 26** are also allowable for least the reasons discussed with respect to Independent **Claim 1**. Therefore, the Applicant respectfully requests that the rejections to Independent **Claims 1, 10, 12, 20, 23, and 26** be reconsidered and withdrawn.

Furthermore, **Claims 2-9** depend from Independent **Claim 1**, and therefore **Claims 2-9** are also allowable for as least the above noted reasons. **Claim 11** depends from **Claim 10**, and therefore **Claim 11** is also allowable for as least the above-noted reasons. **Claims 13-15** depend from **Claim 12**, and **Claims 13-15** are also allowable for as least the above-noted reasons. **Claims 24-25** depend from **Claim 20**, and **Claims 24-25** are also allowable for at least the above-noted reasons. **Claim 27** depends from **Claim 26** and is also allowable for at least the above noted reasons.

Conclusion

In view of the amendments and the remarks above, Applicant respectfully submits that this case is in condition for allowance and such allowance is earnestly solicited. In the event that there are any outstanding matters remaining in the above-identified application, the Office is invited to contact the undersigned to discuss this application.

Respectfully submitted,

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